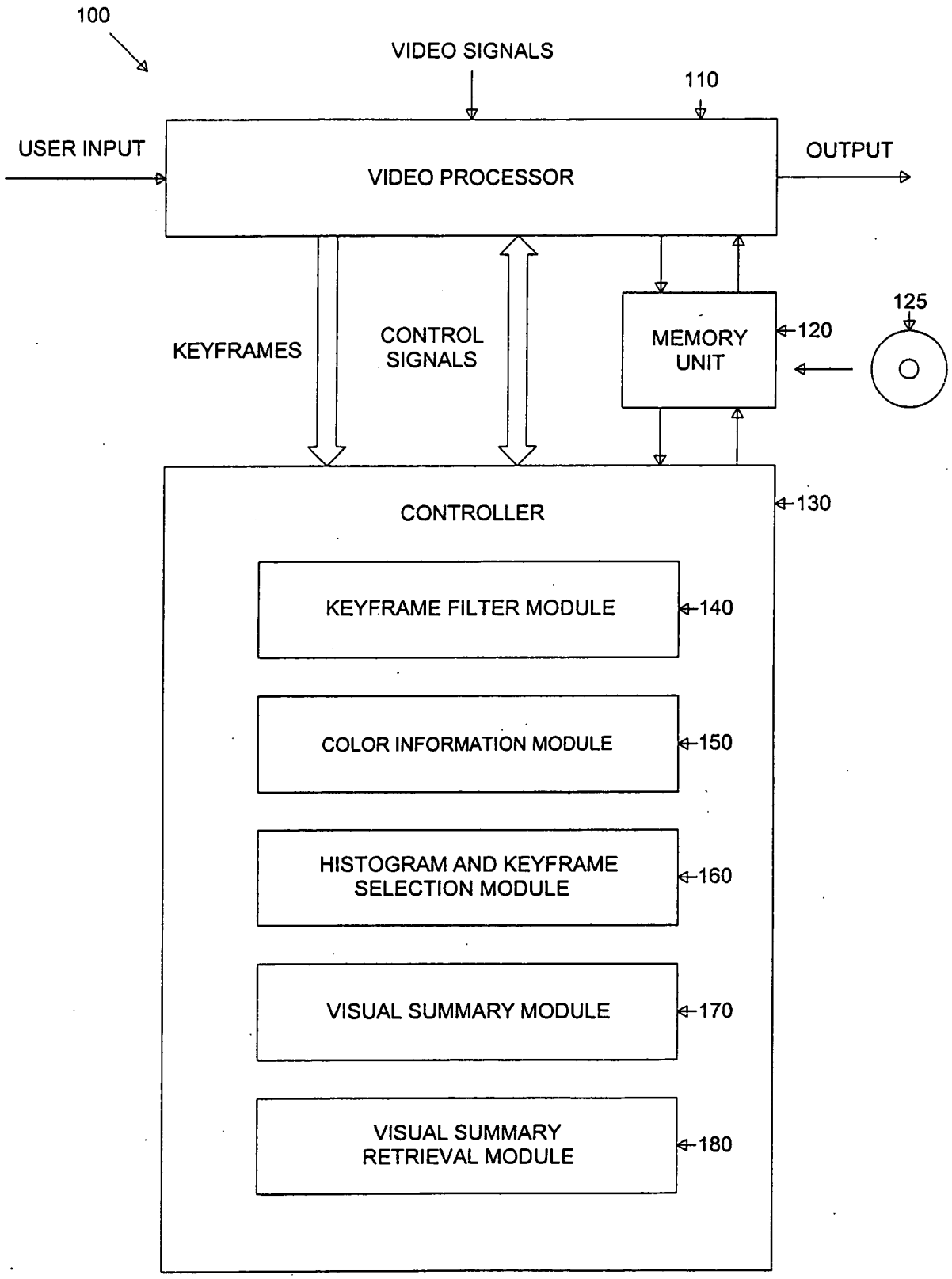
100
VIDEO SIGNALS
110
USER INPUT
VIDEO PROCESSOR
OUTPUT
KEYFRAMES
CONTROL SIGNALS
MEMORY UNIT
120
125
CONTROLLER
130
KEYFRAME FILTER MODULE
140
COLOR INFORMATION MODULE
150
HISTOGRAM AND KEYFRAME SELECTION MODULE
160
VISUAL SUMMARY MODULE
170
VISUAL SUMMARY RETRIEVAL MODULE
180

FIGURE 1

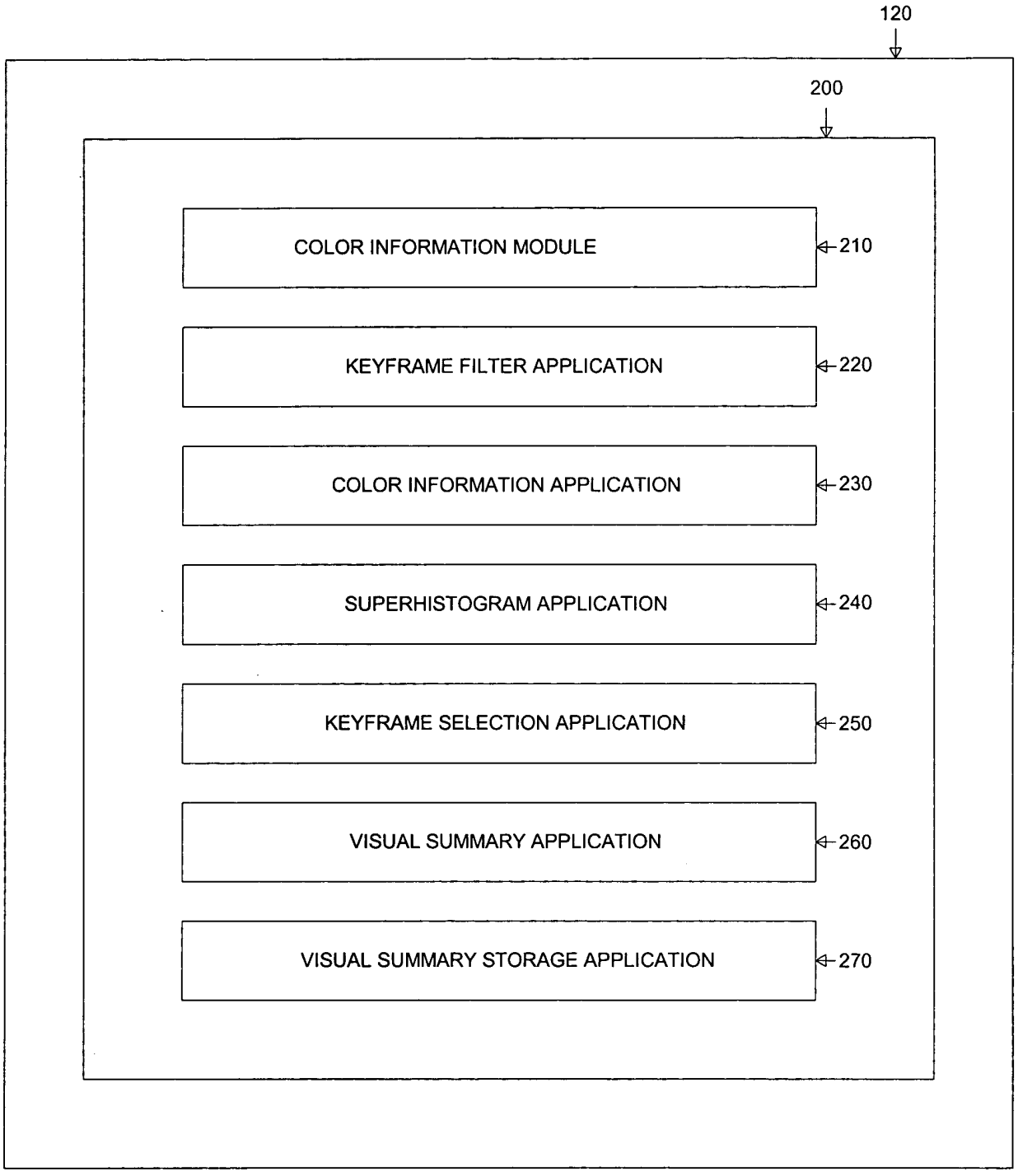
120
200
COLOR INFORMATION MODULE
210
KEYFRAME FILTER APPLICATION
220
COLOR INFORMATION APPLICATION
230
SUPERHISTOGRAM APPLICATION
240
KEYFRAME SELECTION APPLICATION
250
VISUAL SUMMARY APPLICATION
260
VISUAL SUMMARY STORAGE APPLICATION
270

FIGURE 2

METHOD = CHI SQUARE THRESHOLD = 50 %

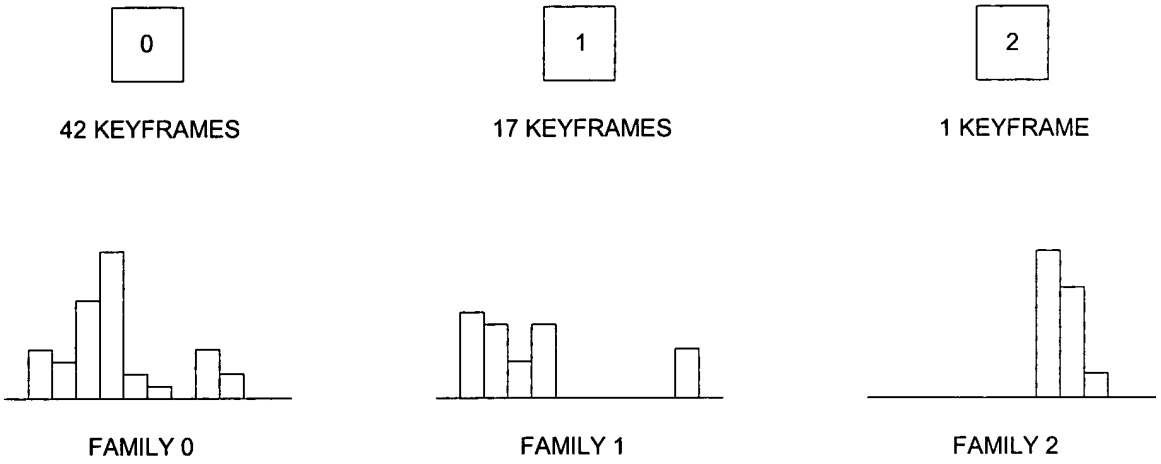

FIGURE 3

EP 0 956 534 B1

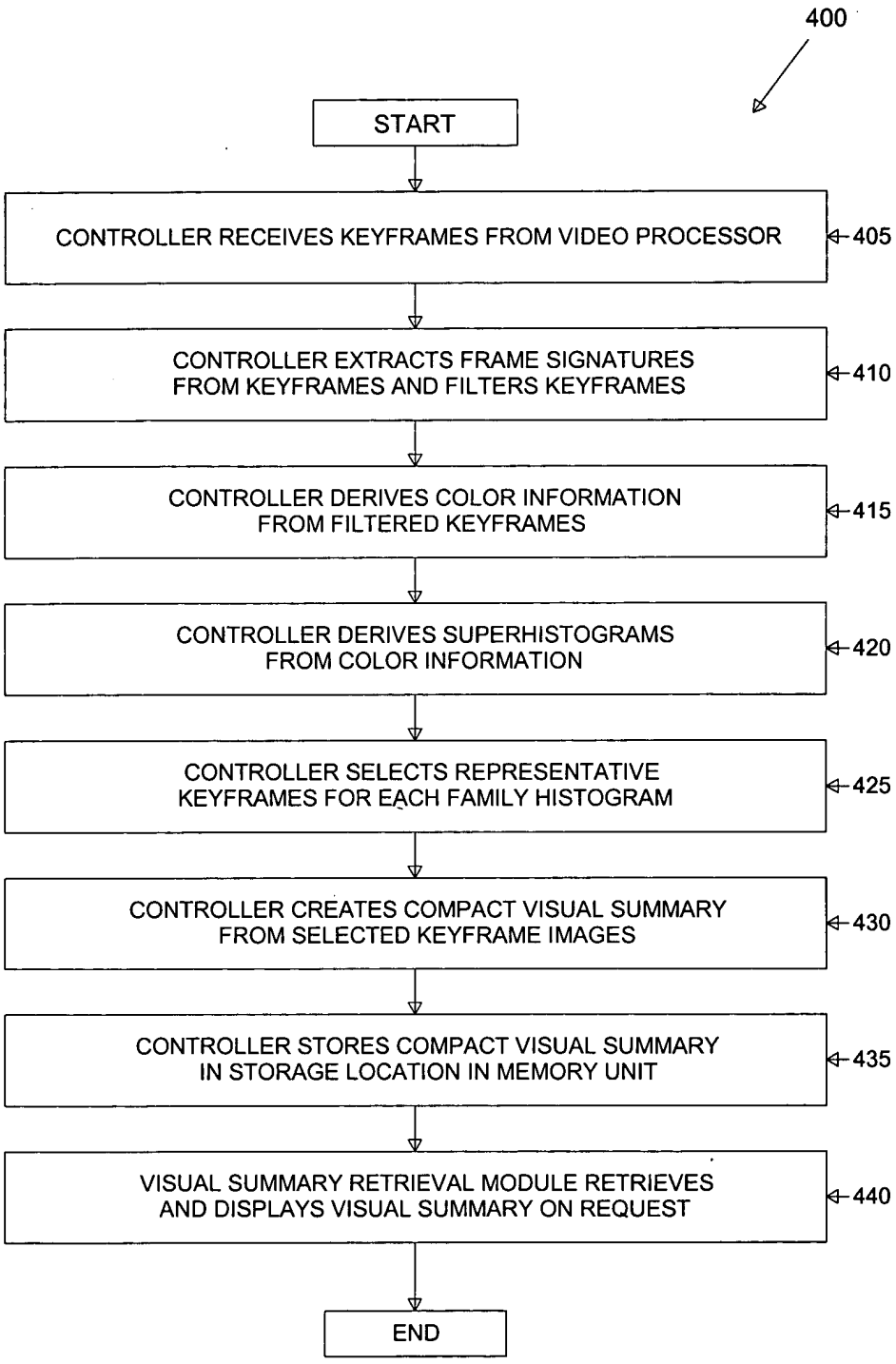
400
START
CONTROLLER RECEIVES KEYFRAMES FROM VIDEO PROCESSOR
405
CONTROLLER EXTRACTS FRAME SIGNATURES FROM KEYFRAMES AND FILTERS KEYFRAMES
410
CONTROLLER DERIVES COLOR INFORMATION FROM FILTERED KEYFRAMES
415
CONTROLLER DERIVES SUPERHISTOGRAMS FROM COLOR INFORMATION
420
CONTROLLER SELECTS REPRESENTATIVE KEYFRAMES FOR EACH FAMILY HISTOGRAM
425
CONTROLLER CREATES COMPACT VISUAL SUMMARY FROM SELECTED KEYFRAME IMAGES
430
CONTROLLER STORES COMPACT VISUAL SUMMARY IN STORAGE LOCATION IN MEMORY UNIT
435
VISUAL SUMMARY RETRIEVAL MODULE RETRIEVES AND DISPLAYS VISUAL SUMMARY ON REQUEST
440
END

FIGURE 4